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Planet (59).

Mean Solar Time of Observation.		Apparent R.A.	Apparent N.P.D.
	h m s	h m s	° ′ ″
1860, Sept. 18	12 43 16·8	0 35 52·15	89 44 35·45
19	12 38 41·2	0 35 12·32	89 53 44·98
25	12 10 54·9	0 31 0·78	90 49 15·43
Oct. 3	11 33 41·1	0 25 13·32	92 2 4·09
16	11 33 58·2	0 16 35·80	93 46 0·28
17	10 29 28·3	0 16 1·69	93 52 50·96

All the observations of N.P.D. have been corrected for parallax.

Occultations of Stars by the Moon.

Day of Obs.	Phenomenon.	Moon's Limb.	Mean Solar Time.	Observer.
			h m s	
1860, Sept. 6	27 Tauri, disapp.	Bright	12 32 19·6	C.
6	27 Tauri, disapp.	Bright	12 32 12·8 (*a*)	J. C.
6	28 Tauri, disapp.	Bright	12 34 40·0	E.
6	η Tauri, reapp.	Dark	12 49 41·0	E.
6	η Tauri, reapp.	Dark	12 49 40·4	J. C.
6	27 Tauri, reapp.	Dark	13 37 24·3	E.
6	27 Tauri, reapp.	Dark	13 37 25·5	J. C.
6	28 Tauri, reapp.	Dark	13 43 40·7	E.
6	28 Tauri, reapp.	Dark	13 43 40·2	J. C.

(*a*), Uncertain to about half a second.

The initials E. and J. C. are those of Mr. Ellis and Mr. Carpenter.

Elements of Planet (59), *determined from the meridian observations made with the Transit Circle at the Royal Observatory, Greenwich, on Sept.* 18, *Oct.* 3, *and Oct.* 16. By Mr. W. Ellis, Assistant at the Royal Observatory, Greenwich.

	° ′ ″	
Mean Anomaly	350 56 49·2	1860, Oct. 2, 12^h G.M.S.T.
Long. of Perih.	18 55 46·7	Mean Equinox 1860·0
„ Asc. Node	170 18 17·0	
Inclination	8 36 30·5	
ϕ	6 49 30·6	
Log a	0·4336174	
μ	793″·561	

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Approximate Ephemeris, calculated from the Elements above.

For Greenwich Mean Noon.

1860.		Apparent R.A.			Apparent N.P.D.		Log. Δ
		h	m	s	°	′	
Nov.	5	0	9	18	95	20·2	0·1973
	6		9	10	95	22·6	
	7		9	4	95	24·8	
	8		9	0	95	26·8	
	9		8	57	95	28·5	0·2072
	10		8	56	95	30·0	
	11		8	56	95	31·2	
	12		8	58	95	32·2	
	13		9	2	95	33·0	0·2175
	14		9	7	95	33·6	
	15		9	14	95	34·0	
	16		9	22	95	34·1	
	17		9	32	95	34·0	0·2281
	18		9	43	95	33·6	
	19		9	56	95	33·1	
	20		10	11	95	32·4	
	21		10	27	95	31·4	0·2390
	22		10	44	95	30·2	
	23		11	3	95	28·9	
	24		11	24	95	27·3	
	25		11	46	95	25·5	0·2501
	26		12	9	95	23·5	
	27		12	34	95	21·4	
	28		13	1	95	19·1	
	29		13	28	95	16·5	0·2613
	30		13	58	95	13·8	
Dec.	1		14	28	95	10·9	
	2		15	0	95	7·8	
	3		15	33	95	4·5	0·2724
	4		16	7	95	1·1	
	5		16	43	94	57·5	
	6		17	20	94	53·8	
	7		17	59	94	49·8	0·2835
	8		18	38	94	45·7	
	9		19	19	94	41·4	
	10		20	1	94	37·0	
	11		20	45	94	32·6	0·2945
	12		21	29	94	27·9	
	13		22	15	94	23·0	
	14		23	2	94	18·0	

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1860.	Apparent R.A.	Apparent N.P.D.	Log. Δ
	h m s	° ′	
Dec. 15	23 50	94 12·9	0·3055
16	24 39	94 7·6	
17	25 29	94 2·2	
18	26 21	93 56·7	
19	27 13	93 51·0	0·3162
20	28 7	93 45·3	
21	29 1	93 39·4	
22	29 57	93 33·4	
23	30 53	93 27·2	0·3269
24	31 51	93 20·9	
25	32 49	93 14·5	
26	33 49	93 8·0	
27	34 49	93 1·5	0·3372
28	35 50	92 54·9	
29	36 53	92 48·1	
30	37 56	92 41·2	
31	0 38 59	92 34·2	0·3474

Nov. 7.

Remarkable Changes observed in the Cluster 80 *Messier.* By Norman Pogson, Esq., Director of the Hartwell Observatory.

(*Communicated by Dr. Lee.*)

This fine globular object, although described as "a compressed cluster," had, until this year, always presented the appearance of a well-defined nebula to my eye, under the moderate powers with which I have been accustomed to behold it. As it comes in the same field of view with M. Chacornac's pair of variable stars, R and S *Scorpii*, it has been under regular inspection for the last seven years; from 1853 to 1856 by the French astronomer, and since 1857 by me also. Admiral Smyth examined it in 1837 and again in 1839, but he, as also Messier, Sir John Herschel, Professors Argelander and D'Arrest, recorded it as either "cometary" or "nebulous."

On the 28th of last May, when searching after the two above-named variable stars, neither of which was then visible, my attention was arrested by the startling appearance of a star of the 7.6 magnitude in the place which the nebula had previously occupied. The power used was 118, on the Hartwell equatoreal; and so recently as May 9th—the last night on which R *Scorpii* was visible—I am able to state positively that the nebula was as usual, and had nothing stellar about it,